

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P554011

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-82-94-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P554011  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-1HI-40-UNV-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

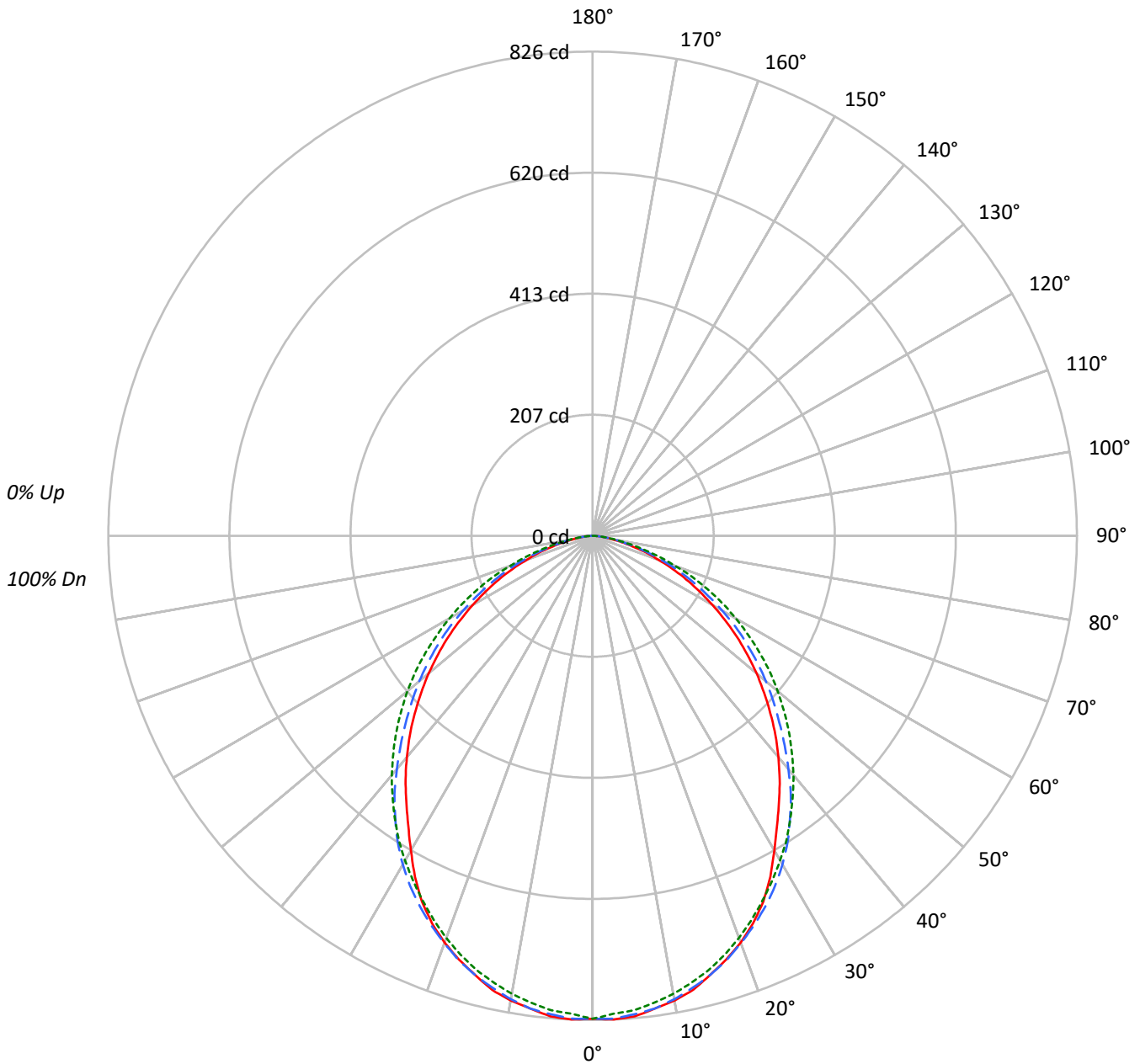
Lumens per Lamp: N/A  
Luminaire Lumens: 1905.0 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4434	4434	4434
5°	4446	4427	4390
10°	4399	4387	4336
15°	4320	4320	4271
20°	4229	4235	4180
25°	4090	4141	4075
30°	3851	4025	3975
35°	3639	3857	3864
40°	3462	3649	3745
45°	3264	3428	3604
50°	3055	3230	3450
55°	2819	3005	3263
60°	2538	2743	3035
65°	2241	2439	2761
70°	1868	2077	2346
75°	1468	1659	1836
80°	1051	1168	1296
85°	685	685	642



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.6	4.1
10°-20°	217.9	11.4
20°-30°	318.4	16.7
30°-40°	361.5	19.0
40°-50°	348.9	18.3
50°-60°	287.9	15.1
60°-70°	191.7	10.1
70°-80°	85.8	4.5
80°-90°	15.3	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	613.9	32.2
0°-40°	975.4	51.2
0°-60°	1612.2	84.6
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	823	823	819	815	812	78
15°	775	777	775	772	767	219
25°	689	694	697	692	686	315
35°	554	562	587	590	588	347
45°	429	436	450	471	474	331
55°	300	305	320	338	348	268
65°	176	181	192	205	217	174
75°	71	74	80	84	88	77
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	823.9	823.9	823.9	823.9	823.9
2.5°	826.1	826.4	824.5	819.4	816.3
5°	822.9	822.6	819.4	815.0	812.5
7.5°	813.7	814.4	813.4	807.1	803.6
10°	804.9	805.2	802.7	797.6	793.5
12.5°	793.5	793.2	789.7	787.1	780.5
15°	775.4	777.3	775.4	772.0	766.6
17.5°	758.0	758.0	759.3	753.3	749.2
20°	738.4	739.4	739.4	734.6	729.9
22.5°	715.6	718.5	719.4	714.4	708.7
25°	688.7	694.1	697.3	692.2	686.2
27.5°	656.1	664.3	673.8	670.0	663.4
30°	619.7	631.7	647.6	644.4	639.7
32.5°	585.2	597.2	619.1	617.8	615.3
35°	553.9	561.5	587.1	590.3	588.1
37.5°	524.1	531.1	555.2	562.4	560.5
40°	492.8	500.4	519.4	532.4	533.0
42.5°	461.8	469.1	484.6	503.2	503.2
45°	428.9	436.1	450.4	471.0	473.5
47.5°	396.6	404.2	418.1	438.7	442.8
50°	364.9	371.9	385.8	405.8	412.1
52.5°	332.0	339.6	353.2	371.6	380.8
55°	300.4	305.4	320.3	338.0	347.8
57.5°	267.4	272.2	289.0	304.2	314.3
60°	235.8	241.8	254.8	270.3	282.0
62.5°	205.4	211.7	222.8	236.4	249.7
65°	176.0	180.7	191.5	205.1	216.8
67.5°	147.5	151.6	162.4	171.9	184.2
70°	118.7	124.1	132.0	141.2	149.1
72.5°	95.6	97.8	104.4	111.1	119.3
75°	70.6	74.4	79.8	83.6	88.3
77.5°	50.6	52.9	56.0	59.2	63.6
80°	33.9	34.8	37.7	38.3	41.8
82.5°	20.6	21.2	21.8	22.2	23.4
85°	11.1	11.1	11.1	10.4	10.4
87.5°	6.3	6.3	5.4	4.4	3.2
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)